

A CHRISTMAS PRESENT.—There seems no valid reason why we should be prevented from expressing our warm admiration of a charming story called "Midsommer Eve," just now published, by Mrs. S. C. Hall, albeit somewhat out of our path. It is full of illustrations, full to overflowing, by MacIise, Stanfield, Crewick, Ward, Goodall, Frost, Noel Paton, Hulme, Landseer, Wehnert, Topham, Kenny Meadows, and others. As most of our readers must know, it was first given in the *Art Union Journal*, but many engravings have been added. The perils which beset a young maid, the conflict of good and evil, are charmingly portrayed, and the refined taste, moral worth, and good heart of its excellent and accomplished author, which shine in every page, render it one of the most fitting presents for the youth of either sex, as eminently calculated for their improvement as their pleasure.

VICTORIA PARK.—The Commissioners of Woods and Forests make the following statement in their report printed on Saturday respecting Victoria Park:—"The appendix, No. 21, contains a schedule of property purchased during the year ended the 5th of January last, under the authority of the Act 5 Vict., sec. 2, c. 20, to extend an Act passed in the fourth and fifth years of her present Majesty, for enabling her Majesty's Commissioners of Woods, &c. to purchase certain lands for Victoria Park, the purchase money for which property amounts to 425*l.*, making, with the sum of 82,898*l.* 3*s.* 1*d.* paid for former purchases, and the further sum of 3,975*l.* still due for a purchase already agreed for, but not completed during the period of this report, the sum of 87,298*l.* 3*s.* 1*d.*, being the total cost of the property required for the site of this park, with the building ground attached thereto, exclusive of the expense of constructing the lodge, bridge, sewers, and roads, planting, fencing, and other works now in progress for the formation of the park; the amount paid in respect of which works, and of all other expenses relating to the park up to the 5th of January last, was 30,521*l.*, making the whole outlay to that date 117,819*l.* 3*s.* 1*d.*" Since the last report, roads and plantations have been proceeded with, and an ornamental piece of water is now in course of formation. The outlay seems prodigious.

RATING WATER COMPANIES.—Lately the officers of the Grand Junction Water-works attended at the Richmond Petty Sessions to answer a summons for the non-payment of a poor-rate to the parish of Kew, for their pipes laid down in the river Thames, in that parish. On the part of the parish it was contended, that the company were liable to be rated for their pipes, although they were not inserted in the soil; and the decision of Judge Bayley, in the case of the King v. the Brighton Gas Company, (5 Bramwell and Bramwell, 470.) and that of Rex v. Bell (7th Term Reports, 598), were cited in support of that view. The solicitor for the company, on the contrary, argued that the occupancy by the pipes was a mere easement, and not rateable, as they were liable to removal, and could only be considered as a part of the stock-in-trade of the company. The bench decided that the company were liable, whether the pipes rested on or were imbedded in the soil, only that in the latter case the rate would be higher.

MEASURING TAPES.—Sir: Very simple things are not to be always despised. The following improvement in measuring tapes seems both simple and obvious, yet I have never seen it adopted, except by myself. I claim no praise for the improvement, but I wish to make it public, if you think it worth making public, merely for the benefit of measurers and tape-makers. Instead, then, of having a round ring at the end of the tape, have a small brass D, the straight side being equal to the width of the tape. The consequence is, the tape will wear much longer, and it can be more accurately adjusted to the tape than a ring. The strain of the tape on a ring is at the two edges, causing the tape to wear, and in a very short time the ring to come off. In the D form the strain of the tape is equal throughout its breadth. I dedicate this improvement to Messrs. Chesterman and Bottom, for their excellent metallic tapes, if they choose to adopt it.—I am, Sir, &c., J. BURNHAM.

Ollerton, Notts.

* Longman and Co.

A HYDROSTATIC TURN-TABLE has been patented by a Mr. Allan, of Crowe. The hydrostatic pressure is employed for the purpose of supporting the weight, not of turning it. The table or platform consists of a hollow water-tight box, made of wrought-iron plates, and supported in the turn-table pit, or reservoir, by water, or other fluid, while it revolves on a central fixed pillar. The pit is filled with water, or other fluid, just sufficient to sustain the maximum weight of the locomotive engine or carriage, the height of the surface of the water being adjusted proportionably with the maximum weight, and so maintained by a ball-cock, attached to a supply-pipe, from a cistern above. On the platform are three separate lines of rails abreast, crossed by three other sets of lines, so that one turn-table is sufficient to effect the transfer by a semi-revolution. The reservoir, or pit, is formed of masonry, or bricks, laid in cement, water-tight, with a firm basis on which the centre pillar can be properly supported.

PROGRESS OF NEW HOUSE OF COMMONS.—In reply to questions asked on the 8th inst., by Lord Duncan, in the Commons, Lord Morpeth stated, that he had been informed by the architect, that he had no doubt the House would be ready for members within fifteen or eighteen months after the arrangements for ventilating, lighting, and warming the House had been settled. The Government, he might add, had thought fit to desire that Dr. Reid's projects might be carried into effect. Further progress had not been made with the official residences, the sums voted having been appropriated to the completion of the shell of the building in the first instance. The library, he believed, was in a state of considerable forwardness; and the architect had informed him that the residences of the Speaker and others would not be habitable until the exterior was more advanced towards completion.

EXPERIMENTS ON CAST-IRON.—Some experiments made at the Crane Foundry on the relative strength of cast-iron, chilled and unchilled, showed that the process of chilling gave a superior strength of 17 per cent. The following experiment was tried on four bars, cast in the form of a double-faced railway rail, 1½ in. deep, 1 in. wide at top and bottom, and ½ in. in the centre—the length of each bar was 18 in., and 15 in. between the supports. No. 1 was cast in green sand; No. 2 in dry sand; No. 3 cast in a chill; and No. 4 in a chill, and afterwards annealed. No. 1 weighed 32.5 ozs., bore 1,232 lbs., and deflected .130 in. No. 2 weighed 30.5 ozs., bore 1,008 lbs., and deflected .114 in.; No. 3 weighed 34.75 ozs., bore 784 lbs., and deflected .053 in.; and No. 4 weighed 34.5 ozs., bore 2,520 lbs., and deflected .148 in. The advantages in favour of cast-iron, treated as No. 4, is evidently little less than 100 per cent. over No. 1, and 300 per cent. over No. 3.

EMPLOYMENT OF THE IRISH PEASANTRY.—A greater extent of land must be brought into cultivation to enable a sufficiency of grain to be produced to feed the people. Happily this can be readily done, and the overplus labour fully employed, with great advantage to the country, by converting the bog or peat land, which spreads itself over three millions of acres, into household fuel and charcoal; for which unceasing demand will arise: and by cultivating the substrata of these bogs, which consist of a soil admirably fitted for agricultural purposes. It has been shown on the map published for "the Irish Amelioration Society," set on foot for employing the overplus labour of Ireland, that the labour of one man will clear in 250 working days from an eighth to a sixth of an acre of peat bog averaged at eight feet deep; and that at 200 stations intended to be established, above 2,500 acres may be cleared annually. This would yield about 22,000 tons of potatoes, and every ten years of operations would add to the cultivable land of Ireland from twenty to thirty thousand acres of the most valuable soil, capable of producing at least 100,000 quarters of wheat per annum.*

STEEPLE-CLIMBING.—Wright, the steeple-climber, has been replacing the vane and pointing the steeple of St. John's Church, in Perth. The kite, by means of which he endeavoured to convey a rope over the vane, failed, and the means he used to accomplish

the ascent were sufficiently daring to deserve notice. He obtained five rods, each about 15 feet long, so as on being joined together they would reach from the bartizan to the summit. They were no thicker than the butt end of a common fishing-rod. The first he placed against the steeple, and with no other than the precarious footing afforded by the lapping of the lead, and with the rod as his only hold by his hands, he climbed up as far as to be enabled to nail and lash the top of it to the steeple. Getting it steadied and secured thus, he pulled up a second rod by means of a cord, lashed it to the top of the first, mounted it also, fastened its top, pulled up a third, and so on until he reached the spire. He then pulled up and secured his tackle, and was soon safely again upon the bartizan. Men may be found to ascend to any altitude by means of scaffolding; but to climb up steeples nearly perpendicular, by means of nails, little bits of twine, and tender sticks, appears altogether incomprehensible.

PROGRESS IN CARLISLE.—The ancient city of Carlisle, after remaining for many years with little change in its condition, has recently begun to emerge from its state of inactivity, and to assume a more lively and bustling aspect. The *Manchester Guardian* says:—"The number of new buildings of all classes bear manifest proofs of the increasing commercial prosperity of the town. The large amount of railway traffic on the Lancaster and Carlisle and Caledonian railways has been chiefly instrumental in bringing about this change, the necessity for which is most apparent. Unfortunately, the sanitary condition of Carlisle still stands very low, nor do its inhabitants seem at all alive to the vital importance of a thorough alteration in this respect. The drains, generally, are very inefficient; and in those parts of the town inhabited by the lower classes, the atmosphere is most offensive,—the refuse from the slaughter-houses, cesspools, &c., being allowed to accumulate to a most injurious extent. This, during the late summer and autumn, has been the cause of much fever and sickness. Active steps have been taken as to a regular supply of water and gas; and it is to be hoped that before long a proper supply of fresh air may be provided by a sounder system of drainage and ventilation. The water-works company are now constructing a large reservoir on Gallows Hill, under the direction of Mr. Simpson, civil engineer. The gas-company have lately built new gas-works, the old ones being purchased by the Lancaster and Carlisle Railway Company. The most important building erected in the town for many years is the new Citadel Station, which is now rapidly approaching towards completion.

PROJECTED WORKS, &c.—Tenders have been called for by advertisement for erecting two wings to the Bedford Lunatic Asylum, and other works; for building a new church at Perth, or for the mason's work separately and the other works collectively; for the erection of certain buildings at the Woburn Union Workhouse; for making alterations required in providing two additional wards at the Liverpool Workhouse, Brownlow-hill; also for manufacturing 5,000,000 of bricks for the new jail about to be erected at Walton (Liverpool), at per 1,000; and for erecting a new timber bridge over the Clyde at Dalmarnock (by Glasgow).

TO CORRESPONDENTS.

- * "Inquirer"—Glass pipes have been made, and doubtless will be more extensively so.
- * "W. W."—Go to a drawing-school for a time.
- * "K."—If a reader of THE BUILDER, would have seen that what the Times did once we have been doing constantly these two years.
- * "Poet."—What asylum does he speak of?
- * "Curmudgeon."—You would obtain what you wish at less cost from an individual. Ask some person to whom you are known.
- * "A Londoner."—Next week.
- * "Treasure of Florence."—I refer to Donaldson's reply to "Inquirer" next week.
- * "Institute of British Architects."—We are compelled to postpone our report of the last meeting. The paper read, "On the Construction of Towers," is likely to excite controversy.
- * "Prescribers' Anonymous Competition."—We are led by representations to postpone giving particulars promised.
- * "Received."—T. H. (Blackney), "Palladio," "C. L." (too late for present number), "D. N." (Bermudez), "W. D." "W. N." shall be inquired into. "Veritas" write to the manager, "A. R." (Dunmore), "E. N." "F. K." just despatched, "J. A." "Quentin Blagay," "The Furnishing and Decorating Assistant," by H. Whitaker, No. 13; "Treasure of Florence," H. Whitaker, Part XIV. (Fisher and Co., St. Martin's-le-grand).
- * "Books, Prices, and Addresses."—We have not time to point out books or find addresses.
- * * Correspondents are requested to address all communications to the Editor, 8, York-street, Covent Garden.

* From "Employment of the Irish Peasantry," by Jasper F.W. Rogers, C.E.: London, Clarendon Press.